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Honey Farming / Processing – Small Business

Turn Potential Into Profit



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Apiculture also known as Beekeeping / Honey farming is becoming a popular source of income in the modern world. This business does not require huge investment and it is also not labor extensive. However, it does require knowledge and the ability to build a good bond with the honey bees in your safekeeping.

Business Opportunity:

Bees have many other uses, apart from producing honey. Below are some of the opportunities in this business:

- Wax is collected from old combs and sold in the market. This wax is great for preparing excellent quality candles, waxes that reduce friction on surfboards and skis, lotions, etc.
- Bee venom is extracted and is used for relieving the symptoms of rheumatism, arthritis, etc.
- Bees use a glue-like substance, known as Propolis, to keep the honeycomb intact. This plant resin is supposed to possess anesthetic or antibiotic properties, which prove useful in the preparation of healing creams and healthy cosmetics.
- Bees collect pollen, as well as prepare royal jelly to use as food

for larvae. These substances are utilized for preparing food additives, which prove useful for both, domestic animals and humans.

Location:

Bees are some of the most adaptable creatures belonging to the animal kingdom, Nonetheless, certain following considerations must be kept in mind when starting this business:

- Ensure that the site is dry, with no dampness around it.
- If the Relative Humidity (RH) level is high, it hampers bees from collecting honey. Note that they fly long distances.
- Humidity also prevents the efficacious ripening of nectar.
- Bees prefer cool and shady places with plenty of trees in the vicinity for optimum production of honey
- Whether provided a natural or artificial source of water, it must be clean and hygienic. In order to obtain high-quality honey, high-quality water must be provided.
- An old hive should be placed nearby, to make the bees realize the friendly environment.
- Although bees do not mind how far they fly, in order to collect pollen, but it must be ensured that pollen yielding plants are present in the vicinity, in order to save the energy and also the bees will be able to prepare high-quality honey all that much faster!
- Ensure that bees have sufficient places to store the pollen they collect, as well as, the prepared honey.

Types of Hives:

Although there are all kinds of innovations under exploration across the globe, three kinds of hives are most popular:

1. Top Bar Hive

The type allows to keep bees at a convenient height. Comprising of a lone and long box, this hive goes in for individual frames, which substitute for a natural honeycomb. Around 24 wooden bars are arranged under the wide and lengthy roof of the box. Every bar possesses a starter strip, which the bees use for setting up the comb, albeit vertically.



2. Langstroth Hive

This type of hive has been present since 1852, when the Reverend L. L. Langstroth invented it. It is extensive and modular in design, wherein vertically hanging frames permit the bees to set up their honeycomb quite conveniently. There are spaces between the internal lining of the beehive and the frames. There is space between one frame and the next. The bees ensure that these bee spaces remain intact, without gluing them together.

Additional boxes, can be placed on top of one another. These additions are the

supers. They may be shallow in depth, deep, or medium.



3. Warre Hive

A French monk, designed the square boxes for this kind of hive. He felt that bees would flourish in a setting resembling the natural environment, such as a hollow tree. Unlike in the Langstroth hive, new boxes go below the existing ones.

Every box is light and small, making the shifting process quite easy. Then again, there are a series of slats, which span across the surface of each box. The bees ensure that their honeycomb hangs vertically downwards. The roof of the box has material, which is suitable for absorbing condensation, if any.



Honey Extraction

The first step in the extraction process is to break or remove all of the capping's. This may be accomplished using an automated uncapper machine or with a manually-operated uncapping knife. Usually, these tools are used together, along with a pronged capping's fork. To facilitate cutting off these wax capping's, the knife is often heated.

The removed bits of wax, called capping's, are rich in honey which can be slowly drained off with the help of some heating. This 'capping wax' is very valuable and often used to make candles or other products. Automated uncapping machines normally work by abrading the surface of the wax with moving chains or bristles or hot knives. This, while messy, makes the process easier than doing this task manually.



Once uncapped, the frames are then placed in a honey extractor, which spins them so that most of the honey is removed by centrifugal force. Care must be taken to ensure that all frames are loaded correctly, as the comb is angled slightly upwards to

prevent the honey flowing out; if loaded incorrectly, this can also prevent the honey flowing out during extraction. Once extracted, the resulting honey will contain bits of wax and must be passed through a screen so that clean liquid honey results.



Packaging and Storage:

Honey is then bottled in small glass jars of different measuring's. Plastic jars can also be used but glass jars are recommended in order to maintain the highest quality of the extracted honey. The extraction machine has a tap beneath its tank which can be opened and hut for bottle filling manually.



The bottled honey is then kept in a cool dry place so that the finished product doesn't catch moisture which could degrade the honey.

Honey Bee Research Institute (HBRI)

Government of Pakistan has established a Honey Bee Research Institute in Islamabad. The main purpose of this institute is to promote honey production and processing business. Following facilities are available at this institute:

- Improvement of integrated honeybee management technology to increase hive products
- Intensive honeybee queen breeding
- Control of pests and diseases using low cost indigenous material
- Promotion of honeybee by-product technology and value-added products
- Conservation and management of pollinators
- Strengthen of honey analysis lab. at NARC
- Capacity building and awareness raising for conserving indigenous honeybee species
- Organize training courses for livelihood

The institute also offer following services:

- Backstopping-provision of wax foundation sheets to small beekeepers of Apis Cerana and A. Mellifera (Types of Bee)
- Provision of quality queens to beekeepers and provincial institutes
- Sale of bi- product from experimental honey producing colonies.
- Training for making beekeeping equipment

- Ornamental / Minor honey plant (Antigonon leptopus) "Chain of Love" available for sale
- Introductory package of pollen capsules and royal jelly as health food has been introduced
- Training for promotion of beekeeping for income generation

SMEDA Honey Processing and Packaging (CFC) Mingora, Swat

The objectives of the Honey Processing & Packaging Plant (CFC) can be summarized as follows;

- To provide proper Honey Extracting, Processing facilities, Honey Cleaning and Packing facility to the Honey Bee Farmers, Honey traders and Honey exporters at their doorstep.
- To add value through better bottling & packing.
- Improve quality of the product through state of the art technology.
- Increase profitability through lower transportation costs.
- To open up new markets and increase export of Honey by providing the international standard facility to the cluster stakeholders

Useful Links:

www.parc.gov.pk

www.psqca.com.pk

www.shahfarm.com

www.pastic.gov.pk

www.tdap.gov.pk

www.psqca.com.pk

www.hashoofoundation.org.pk

www.smeda.org.pk



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